Advanced Materials Technical Datasheet



PHENOXY PK™ FE Resin

Product Description

PHENOXY PK[™]FE has a high viscosity compared to most phenoxy resins. Phenoxy resins (polyhydroxyethers) are tough, ductile, amorphous, thermoplastic polymers having excellent thermal stability, adhesive strength, and vapor barrier properties. Phenoxy resins may be crosslinked by reacting its hydroxyl functional groups with isocyanates, melamine resins, or phenolic resins. Crosslinked phenoxy resins exhibit excellent chemical resistance, hardness, and adhesion on many substrates including steel, aluminum, glass, and carbon fibers, and plastics such as nylon and polyester (PET). PHENOXY PK[™]FE may also be formulated in single-pack epoxies containing latent hardeners, such as dicyandiamide, providing improved toughness and adhesive strength on substrates when properly cured. PHENOXY PK[™]FE is soluble in many polar, aprotic solvents such as MEK, cyclohexanone, and glycol ethers.

Applications

- Thermoset Coatings
- Single Pack Epoxy Coatings
- Inks and Paints
- Adhesives/Sealants
- Composites
- Electronics

Specified Key Properties

Property	Value
Color*, APHA	200
Solids, %	98
Viscosity* (Brookfield) at 25 °C, cP	600-895
Molecular Weight (weight average), Daltons	60,000
OH Equivalent Weight (g/equivalent)	280
Haze*, % (max)	15

^{*20%} solution in cyclohexanone

Advanced Materials Technical Datasheet



Regulatory Status

TSCA (USA), DSL (Canada), PICCS (Philippines), AICS (Australia), ENCS/MITI (Japan), IECSC (China). Polymer Exempt: EINECS (EU)

Storage

PHENOXY PK[™] FE should be stored in a dry place, in its sealed original container, at temperatures between 0°C - 40°C (32°F - 104°F). Under these storage conditions the product has a shelf life of 10 years from date of manufacture. The product should not be exposed to direct sunlight.

Phenoxy resins may absorb water, ~1% by weight, if exposed for long periods of time to the atmosphere. Pellets can be dried at 80 - 90 °C if desired.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up—to-date Safety Data Sheets (SDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

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